of England, and the Saxon spirit Hudkin or Hodeken, so called from the hoodakin or little hood wherein he appeared—a spirit similar to the Spanish Duende. The Fir Darrig has also some traits of resemblance in common with the Scotch Brownie, the German Kobold (particularly the celebrated one, Hinzelman), the English Hobgoblin (Milton's "Lubber Fiend"), and the Follet of Gervase of Tilbury."

The stories in our present number we select not so much for being the best, but for best suiting the limited space of our little publication. In reference to other stories in the work, we may observe, that in his pruning for the present edition, it had been well if Mr. Croker had left out some of those passages, which will go far to strengthen religious superstitions, and which, we have no doubt, will be considered highly objectionable by a particular class of our readers.

"THE LORD OF DUNKERRON.

The lord of Dunkerron*—O'Sullivan More,
Why seeks he at midnight the sea-beaten shore?
His bark lies in haven, his hounds are asleep;
No foes are abroad on the land or the deep.

Yet nightly the lord of Dunkerron is known
On the wild shore to watch and to wander alone;
For a beautiful spirit of ocean, 'tis said,
The lord of Dunkerron would win to his bed.

When, by moonlight, the waters were hush'd to repose,
That beautiful spirit of ocean arose;
Her hair, full of lustre, just floated and fell
O'er her bosom, that heav'd with a billowy swell.

Long, long had he lov'd her—long vainly essay'd
To lure from her dwelling the coy ocean maid;
And long had he wander'd and watch'd by the tide,
To claim the fair spirit O'Sullivan's bride!

The maiden she gazed on the creature of earth,
Whose voice in her breast to a feeling gave birth;
Then smiled; and, abashed as a maiden might be,
Looking down, gently sank to her home in the sea.

Though gentle that smile, as the moonlight above,
O Sullivan felt 'twas the dawning of love;
And hope came on hope, spreading over his mind,
Like the eddy of circles her wake left behind.

The lord of Dunkerron he plunged in the waves,
And sought through the fierce rush of waters, their caves;
The gloom of whose depth studded over with spars,
Had the glitter of midnight when lit up by stars.

Who can tell or can fancy the treasures that sleep
Intombed in the wonderful womb of the deep?
The pearls and the gems, as if valueless, thrown
To lie 'mid the sea-wrack concealed and unknown.

Down, down went the maid—still the chieftain pursued;
Who flies must be followed ere she can be wooed.
Untempted by treasures, unawed by alarms,
The maiden at length he has clasped in his arms!

They rose from the deep by a smooth-spreading strand,
Whence beauty and verdure stretch'd over the land.
'Twas an isle of enchantment! and lightly the breeze,
With a musical murmur, just crept through the trees.

The haze-woven shroud of that newly born isle,
Softly faded away, from a magical pile,
A palace of crystal, whose bright-beaming sheen
Had the tints of the rainbow—red, yellow, and green.

And grottoes, fantastic in hue and in form,
Were there, as flung up—the wild sport of the storm;
Yet all was so cloudless, so lovely, and calm,
It seemed but a region of sunshine and balm.

'Here, here shall we dwell in a dream of delight,
Where the glories of earth and of ocean unite!
Yet, loved son of earth! I must from thee away;
There are laws which e'en spirits are bound to obey!

'Once more must I visit the chief of my race,
His sanction to gain ere I meet thy embrace.
In a moment I dive to the chambers beneath:
One cause can detain me—one only—'tis death!'

They parted in sorrow, with vows true and fond;
The language of promise had nothing beyond.
His soul all on fire, with anxiety burns:
The moment is gone—but no maiden returns.

What sounds from the deep meet his terrified ear—
What accents of rage and of grief does he hear?
What sees he? what change has come over the flood—
What tinges its green with a jetty of blood?

Can he doubt what the gush of warm blood would explain?
That she sought the consent of her monarch in vain!
For see all around him, in white foam and froth,
The waves of the ocean boil up in their wroth!

The palace of crystal has melted in air,
And the dies of the rainbow no longer are there;
The grottoes with vapour and clouds are o'ercast,
The sunshine is darkness—the vision has past!

Loud, loud was the call of his serfs for their chief;
They sought him with accents of wailing and grief:
He heard, and he struggled—a wave to the shore,
Exhausted and faint bears O'Sullivan More!"

* The remains of Dunkerron Castle are distant about a mile from the village of Kenmare, in the county of Kerry. It is recorded to have been built in 1596, by Owen O'Sullivan More.—(*More* is merely an epithet signifying the *Great*.)

LOCOMOTIVE ENGINES ON THE DUBLIN AND KINGSTOWN RAILWAY.

In a former number of our Journal, while describing the line of railway, we took occasion incidentally to notice, that there had been six Locomotive Engines built expressly for the company here—three by Messrs. Forrester and Co., of Liverpool, and three by Messrs. Sharpe, Roberts, and Co., of Manchester. The engraving in our present number gives a correct representation of one of those manufactured by the latter house. For the following description of the engine we are indebted to Mr. E. Heyden, to whom we would take this opportunity of expressing our acknowledgments for several other communications and drawings of an interesting character.

Before describing the Locomotive Engine itself, it may be necessary, for the sake of those readers who have not had an opportunity of seeing a railway, to premise that the engine does not move by means of a line of cogs and corresponding cogged wheel, which is the generally received opinion of persons who have not had an opportunity of seeing a Locomotive at work, but is propelled by the adhesion caused by its own weight on the rail, which pressure of adhesion must be more than the exact power necessary to move the train of attached carriages; otherwise, although the engine may be set to work, it will not move forward. If, for instance, an over-proportionate train of coaches be attached to the engine when set in motion, the steam-power will, in some degree, raise the engine; the wheels will then slip or revolve without moving the machine, and so continue until either an additional weight be placed over the wheels of the engine, or the train of carriages be made less.—Each engine may be estimated at about ten tons weight, and is calculated to draw a train of carriages from sixty to eighty tons weight, at the rate of twenty miles per hour: each railway coach may be estimated at two and a half or three tons; they are fourteen feet long by six feet wide, and are capable of accommodating according to the different classes, eighteen, twenty-four, and thirty-five persons respectively, beside luggage.

In order to explain why the engine is capable of propelling so great a weight at the rapid speed we have mentioned, although in a former number we have endeavoured to describe the construction of the road or *plane* upon which the vehicles move, it may be necessary here again to observe—first—That a railway is nothing more than a common road, made as nearly level and straight as possible, upon which are laid two or more lines of wrought iron tracks set in stone blocks, upon which the wheels of a coach or other machine may move with a degree of steadiness and facility. Second—that the rail

tracks are higher than the road, and of a convex surface; thereby obviating the inclined planes and other obstacles, which a machine moving on the common turnpike road has ever to encounter. Third—That the periphery or outer rim of the wheels, which move on the track, are flat on the bearing surface, with a flange on the inside of each wheel, which occasionally touches the track, and prevents the machine from moving off the rail. Fourth—that the rail-track has not a continued bearing from *end to end* of the line, but is supported at every three or four feet by metal beds set in granite blocks, which are perforated and plugged generally with hiccary wood, to receive pins for making fast the metals; from which arrangement it is evident that the rail tracks are so many continued lines of elasticity, and as the bearing of the wheels, when in contact with the rails, are diminished to points, thus, undoubtedly, diminishing the friction to the slightest possible degree on the periphery of the wheel, and, thereby, consequently affording the greatest facility to the moving body.

We shall now proceed to describe the Locomotive Engine, of which we give a drawing in the opposite page. The frame, A, on which the works are constructed, is made of strong wrought iron; it is 15 feet long, by 7 feet in width, and is supported by four springs, (concealed within the frame) on an equal number of wheels, which revolve with the axle: along the centre of this framing is placed a wrought iron boiler, B, of a cylindrical form, at one end of which is the furnace, C, from which the caloric or heat is conveyed through the water in the boiler by a number of pipes or tubes, which form the communication with the chimney placed at the other end; these tubes in the engine here represented amount to upwards of ninety, and are about an inch and a half in diameter. On the top of the chimney is placed a wire net capping, D, to arrest the ignited particles of coke which are carried through the tubes by the rapid draught necessary to maintain the intense fire required in the furnace, and which is caused by the waste steam after it has performed its work in the cylinders, being allowed to rush upwards through the flue, and so escape into the atmosphere, which it does with great force. At the furnace end, where the engineer and assistant stand, are placed three gauge-cocks, E, for ascertaining the quantity of water in the boiler. Also the levers, F, by means of which the motion of the machine either backward or forward, is perfectly under control, and may be almost immediately directed as occasion requires. On the boiler are placed two safety valves; one of these, G, is under the control of the engineer, so that he can regulate the elastic force of the steam; but the second valve, H to which he has not access, is previously adjusted for the maximum pressure or force required. He is by this arrangement effectually prevented from endangering the safety of the boiler by exposing it to a greater elastic force than it is capable of resisting. From the upper part of the boiler, tubes or conducting pipes, convey the steam to the slide-valve box, K, which in this engine is of a peculiar form, invented by Mr. Roberts: this box is connected to the cylinders, L, which are made fast to the framing before mentioned, at either side of the boiler. The slide-valve box is a reservoir from which the steam by the action of the valve, regulated by the motion of the whole machine, is alternately admitted into the upper and lower chambers of the cylinder, the pressure or elastic power of the steam thus acting upon the upper and lower faces of the piston, forces it alternately upward and downward, and then passes off by the under tube, R, called the ejection or waste-pipe, into the chimney, as before described.

The piston-rod, M, passes through a stuffing-box, placed on the upper external surface of the cylinder, and is packed with oiled cotton or hemp, through which the rod moves freely without admitting the least possible portion of steam to escape. On each side of the engine-framing is also introduced a bell-crank movement, N, which receives motion from the piston by a connecting rod at one end, and gives motion to the hind wheels by a similar connecting rod, O, which is attached to the crank-pin fixed to the nave of the wheel, at a distance from its centre equal to half the stroke of the piston, and therefore causes it to revolve on the principle of a common spinning-wheel.* Attached to this bell-crank movement may also be seen through the eliptic aperture, a rod, P, which is continued on to the force-pump, Q, and by a lesser stroke than the piston, with a well-proportioned pump, sends the requisite quantity of water into the boiler, to supply the place of that converted into steam: this water is drawn through a flexible tube from the tender, (which is a separate machine for carrying a supply of fuel and water, and is necessarily attached to every Locomotive Engine). The crank-pins on the nave of each wheel are so disposed as never to be both at their dead points at the same time, or, in other words, they are at right angles with each other.

In the tubes, I, which we before mentioned, as the conductors of the steam from the top of the boiler to the cylinder, are placed regulators, the nature of which may be easily conceived, by imagining the principle of a common water-cock; these may be turned so as entirely to cut off the communication between the cylinders and boiler, and by shutting in the steam, stop the machine altogether, or let it flow more or less as speed or occasion may require. In manufacturing engines an apparatus, termed a governor, actuated by the machinery, regulates the speed of the engine; but in Locomotives, the engineer has this duty to perform.

Having thus far given an outline description of the Locomotive Engine, we will now endeavour to explain the ingenious principle upon which the boiler (where alone there could be any risk of explosion) is constructed, and point out how unfounded are the fears of those who apprehend such an accident. To describe it in terms familiar to every capacity, we will suppose a long barrel or cylinder of any description, closed at each end, and divided by two internal partitions into three unequal spaces; one of these spaces or chambers, between one of the partitions and the external end, may represent the furnace—the other, the opening to the flue or chimney; the space between these partitions contains the water to be converted into steam, for which purpose a number of tubes convey the heat, arising from combustion in the furnace, immediately through the water; and as the caloric liberated in the furnace by combustion, has no other means of escape than through these tubes along with the rarified air, and being thus exposed to very extensive surfaces, it is transmitted with the utmost rapidity to the water. These tubes are made of thin sheet copper or brass, and are the only parts of the boiler exposed to the action of the fire, or subject to any wear, but being entirely surrounded by water on their outsides, they are effectually protected. We have seen tubes taken from Locomotive Engines after having travelled thirty thousand miles without being seriously worn; should, however, a fissure from expansion of the tubes by intense heat, or by any other equally unforeseen or uncontrollable cause lead to the breaking of a tube, no other inconvenience could possibly be felt than delay, as the water and steam would immediately rush from the boiler into the furnace, and extinguish the fire; in fact, we know such an occurrence not to be uncommon on the Liverpool and Manchester railway, and the passengers are no otherwise sensible of it than from the train ceasing to move.

The carriages when propelled, are continually striking, or to use a *technical* phrase, buffing against each other, the effect of which is most materially felt when either starting or stopping, and in order to prevent this repeated concussion, a buffing and drafting apparatus has been ingeniously attached to a large spring in the centre of each carriage, which entirely counteracts the effect that the first impetus of an engine would otherwise occasion, and which would be both annoying and dangerous.

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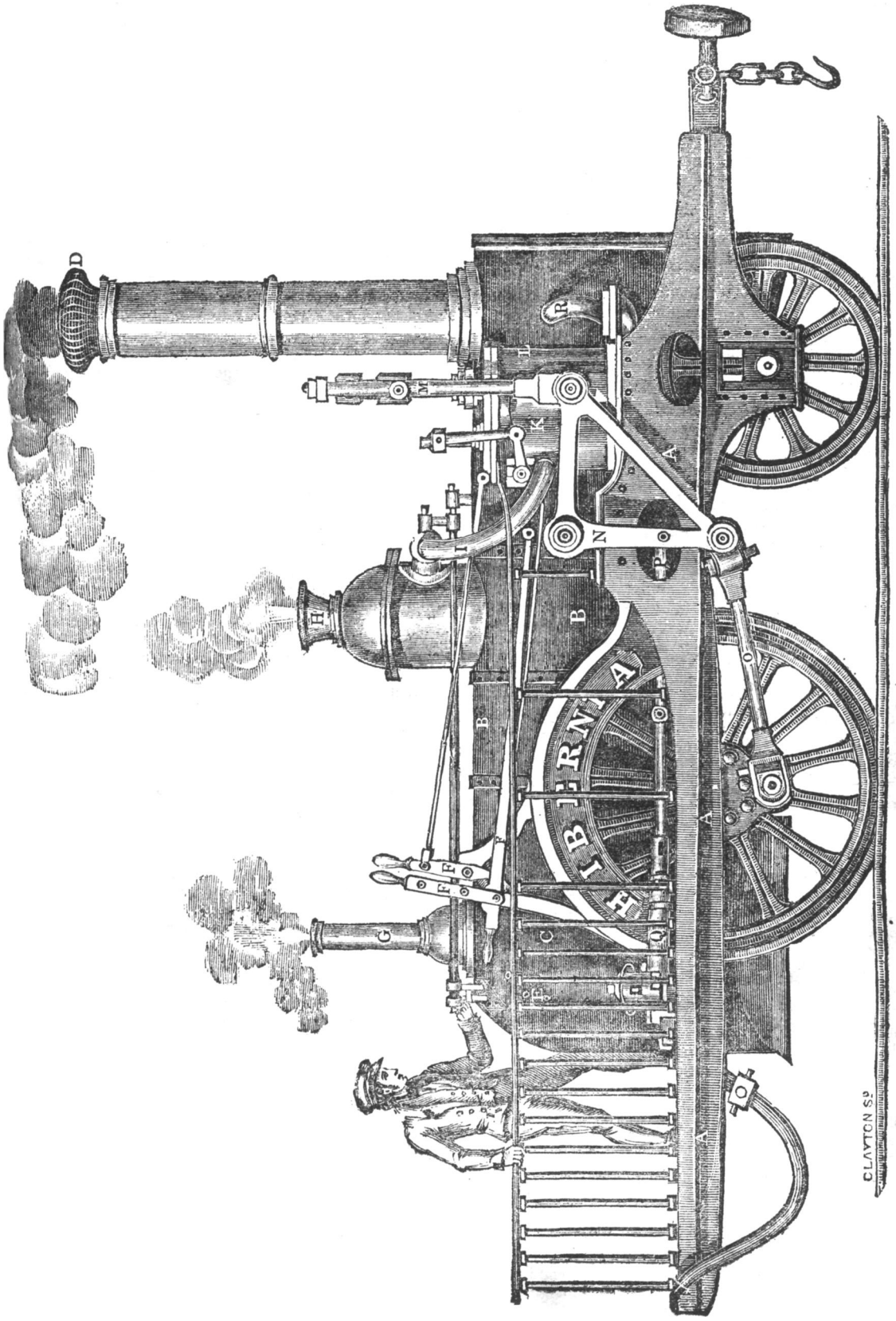
* We may here remark, that the larger the working wheels are, the greater will be the speed, and the less the power; and, *per contra*, the less the wheels the less will be the speed and the greater the power: the wheels under the *Hibernia engine*, which we are at present describing, are five feet high, which is the size found, from experience, best calculated as a medium between speed and power.



LOCOMOTIVE ENGINE—DUBLIN AND KINSTOWN RAILWAY.